

CLAIMS

What is claimed is:

- 5 1. A distributed system, comprising:
 master clock coupled to a timing signal path,
 the master clock having means for generating a timing
 signal on the timing signal path in response to a
 time event associated with the master clock;
10 slave clock coupled to the timing signal path,
 the slave clock having means for adjusting a local
 time in the slave clock in response to the timing
 signal received via the timing signal path.
- 15 2. The distributed system of claim 1, wherein the
 timing signal comprises at least one signal pulse
 which is aligned to the time event.
- 20 3. The distributed system of claim 1, wherein the
 means for adjusting includes means for generating a
 time-stamp in response to the timing signal.
- 25 4. The distributed system of claim 3, wherein the
 means for adjusting further includes means for
 obtaining a time-stamp from the master clock that
 indicates a local time in the master clock.
- 30 5. The distributed system of claim 4, wherein the
 means for obtaining comprises means for obtaining the
 time-stamp via a network.

6. The distributed system of claim 4, wherein the means for obtaining comprises means for obtaining the time-stamp via the timing signal path.

5 7. The distributed system of claim 4, wherein the means for adjusting further comprises means for determining a correction to the local time in the slave clock in response to the time-stamps.

10 8. The distributed system of claim 1, wherein the timing signal comprises a continuous frequency signal.

15 9. The distributed system of claim 8, wherein the continuous frequency signal includes a distinguished pattern which is aligned to the time event.

20 10. The distributed system of claim 9, wherein the means for adjusting includes means for generating a time-stamp in response to the distinguished pattern.

11. The distributed system of claim 9, wherein the means for adjusting further includes means for obtaining a time-stamp from the master clock that indicates a local time in the master clock.

25 12. The distributed system of claim 11, wherein the means for obtaining comprises means for obtaining the time-stamp via a network.

30 13. The distributed system of claim 11, wherein the means for obtaining comprises means for obtaining the time-stamp via the timing signal path.

14. The distributed system of claim 13, wherein the time-stamp from the master clock is encoded in the continuous frequency signal.
- 5 15. The distributed system of claim 11, wherein the means for adjusting further comprises means for determining a correction to the local time in the slave clock in response to the time-stamps.
- 10 16. A clock node, comprising:
means for communication via a timing signal path;
means for generating a timing signal on the timing signal path in response to a time event.
- 15 17. The clock node of claim 16, further comprising:
means for generating a time-stamp in response to the time event;
means for transferring the time-stamp via a
20 network.
18. The clock node of claim 16, further comprising:
means for generating a time-stamp in response to the time event;
25 means for transferring the time-stamp via the timing signal path.
19. The clock node of claim 16, wherein the means for generating a timing signal comprises means for
30 generating a continuous frequency timing signal.
20. A clock node, comprising:

means for communication via a timing signal path;

means for adjusting a local time in response to a timing signal received via the timing signal path.

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21. The clock node of claim 20, wherein the means for adjusting includes means for generating a time-stamp in response to the timing signal.

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22. The clock node of claim 20, wherein the means for adjusting includes means for obtaining a time-stamp for the time event via a network.

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23. The clock node of claim 20, wherein the means for adjusting includes means for obtaining a time-stamp for the time event via the timing signal path.

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24. The clock node of claim 20, further comprising means for generating a local clock frequency by phase locking to the timing signal.